

**REQUEST FOR PROPOSAL  
FOR  
DESIGN/BUILD PHOTOVOLTAIC SYSTEM  
PEMACO REMEDIAL ACTION  
CITY OF MAYWOOD, LOS ANGELES COUNTY, CA**

March 20, 2007

TN & Associates (TN&A) invites qualified solar energy firms to submit a proposal for designing and installing a photovoltaic system (PV system) for the Pemaco Treatment System.

**1.0 INTRODUCTION.**

TN & Associates is under contract to the U.S. Army Corps of Engineers (USACE) to install a soil and groundwater remediation system at the Pemaco Superfund Site (the "Site"), located at 5973 South District Blvd., Maywood, CA, 90270, intersection of S. District Blvd. and 60<sup>th</sup> Street. The purpose of this Request for Proposal (RFP) is to solicit qualified solar energy firms (hereafter referred to as Contractor) to design and build a photovoltaic system (PV system) for an 80'x50' Treatment Compound (TC). The TC is within the Site and under the management of the USACE and U.S. Environmental Protection Agency (USEPA).

**2.0 DESCRIPTION OF WORK AND SERVICES**

The Contractor will design and install a grid-tie PV system on the south-facing roof (pitch 4:12) of the TC. The conceptual design is shown in attached Drawing C-11A Treatment Compound Solar Panel Plan. The roof available collateral load for PV system is 4.00 LB/SF (see attached collateral load calculation sheet for detail). The grid-tie system shall be installed with battery backup power to keep critical loads operating (e.g. computers and Treatment System) in the event of a power failure. All solar inverters, converters, and charge controllers shall pass the UL 1741 test standard. Other accessories used in the PV system (e.g. batteries, reversible meter, wires, etc) shall meet National Electrical Code (NEC). The Contractor shall complete a final design package for TN&A and USACE's approval. After TN&A and USACE both approve the final design, the Contractor will schedule to construct the PV system under TN&A's supervision. Please note that the Contractor has to conduct a site walk prior to starting the PV system design.

**3.0 SCOPE OF WORK**

The Contractor shall provide all equipment and labor for the following tasks:

- Conduct a site walk with TN&A's field personnel to see project overview.
- Design a grid-tie PV system with battery backup power on the south-facing roof of the Treatment Compound.

- Prepare a final design package for TN&A and USACE's approval. The final design package shall include structural/electrical drawings, solar panel plan, equipment specifications, energy production estimation, cost saving estimation, etc.
- Install PV system under TN&A's supervision.
- Schedule the utility interconnection with the Southern California Edison and arrange municipal or utility inspection if required by governing municipality.
- Provide Operation and Maintenance (O&M) Manual for the PV system.
- The Contractor will be responsible for their own Health and Safety and shall perform all work according to the USACE's H&S manual EM 385 1-1. The TN&A Health and Safety plan is maintained at the Site and must be followed at all times during field activities.
- This is a prevailing wage job. Bid must reflect prevailing wage rates in accordance with the Davis Bacon Act.
- The Contractor must be licensed and insured in the State of California to perform PV system installation and associated tasks.

#### **4.0 ASSUMPTIONS**

- Assume working hours may be between 7 Am and 5 PM, Monday - Friday. Weekend work hours are subject to review and approval by The City of Maywood Building and Planning Department.
- The Treatment System is located in the 80' x 50' Treatment Compound, a pre-engineered steel building. The south-facing steel roof is 81'-4" long x 27'-11" wide. The roof pitch is 4:12 and the ridge is 20' high. There is one exhaust stack with three guy wires penetrates the roof (refer to C-11A for details).
- The available collateral load for solar panels is 4.00 LB/SF.
- The electric meter is installed on a separate panel east side of the building.
- The battery backup power system will be installed in the electrical room of the TC.
- The battery backup power will be used for the computers, backup lighting, and the Treatment System in the event of a power failure to keep a critical loads operating. The Contractor will recommend the entire system.
- Pemaco Electrical Plans to be provided at site walk.
- The Contractor agrees to perform construction activities in accordance with an approved Health and Safety Plan (HASP) generated by TN&A. The Contractor agrees to review and sign the HASP and participate in daily tailgate safety briefings each day before field activities and sign Tailgate Safety Briefing Forms.

## **5.0 COST PROPOSAL**

The Contractor must submit a specific proposal for a FIRM FIXED PRICE contract based upon the Bid Sheet price contained in Attachment B (Bid Sheet). The Contractor must submit a proposed price for each bid item listed in Attachment B. **It is important that Attachment B be filled out completely. An incomplete submittal of Attachment B will be grounds for disqualification.**

## **6.0 INQUIRIES**

All inquiries regarding this RFP should be made in writing and sent electronically to John Wingate via email at [jwingate@tnainc.com](mailto:jwingate@tnainc.com) or as a hardcopy to the following address:

John Wingate, Senior Engineer  
TN & Associates  
317 E. Main Street  
Ventura, CA 93001  
(805) 585-6389

Dacre Bush  
TN & Associates  
805-295-9071

## ATTACHMENT B

### SUBCONTRACT/SERVICES BID SHEET

Bidder submits the following prices to T N & Associates, Inc. (TN&A) for performing all work described in the Statement of Work and technical specifications. Prices shall include, but not be limited to, furnishing all plant, labor, technical, and professional services, supervision, materials, tools, equipment, applicable taxes, any necessary work permits, and any and all operations necessary or required to accomplish the work. Bidder's pricing proposal shall be completed, executed, and dated or the offer may be deemed non-responsive. The unit prices shall be applicable to quantities within (+ or -) 30% of the estimated quantity.

Bidder's proposal price shall also include the following required items:

The **Service Contract Act** will apply to any resultant Subcontract. Applicable Davis-Bacon wage rates are available at <http://www.wdol.gov/dba.aspx> or upon request from TN&A. Bidder's proposal shall include all applicable wage rates.

**Payment terms** under any resultant Subcontract will be payment within seven (7) days after Buyer receives payment of the approved invoice amount from the Client.

Subcontractor shall maintain the following **insurance** under any resultant Subcontract:

- a. Workers' Compensation – Statutory coverage. If applicable, coverage must include U.S. Longshore and Harbor Workers' Act and/or Maritime Coverage endorsements which should be noted on the certificate.
- b. Employer's Liability - \$1,000,000 bodily injury by accident – each accident; \$1,000,000 bodily injury by disease – policy limit; \$1,000,000 bodily injury by disease – each employee.
- c. General Liability - \$1,000,000 each occurrence, \$2,000,000 aggregate including per project aggregate limits.
- d. Automobile Liability - \$1,000,000 combined single limit including owned, non-owned, and hired vehicles. If any hazardous substances are transported must include a MCS-90 endorsement and Motor Carriers Act of 1980 coverage applicable in the jurisdiction where the operations of the insured are performed.
- e. Professional Liability - \$1,000,000 each claim. Required if performing professional services, including but not limited to, laboratory, engineering, and other technical services.
- f. Pollution Liability - \$1,000,000 per occurrence. Required if Work involves invasive work or hazardous substances, including but not limited to field services and drilling, and transportation and disposal services. If the Work includes asbestos abatement, mold, mildew or fungus, these must be specifically included and referenced on the certificate.

**Proposal Acceptance:** If Bidder's proposal is accepted within 90 calendar days from the date below, Bidder agrees to furnish any or all items/services as proposed.

Item #	Item Description	Est. Qty.	Unit	Unit Price	Extended Price
1					
2					
3					

Company Name: \_\_\_\_\_

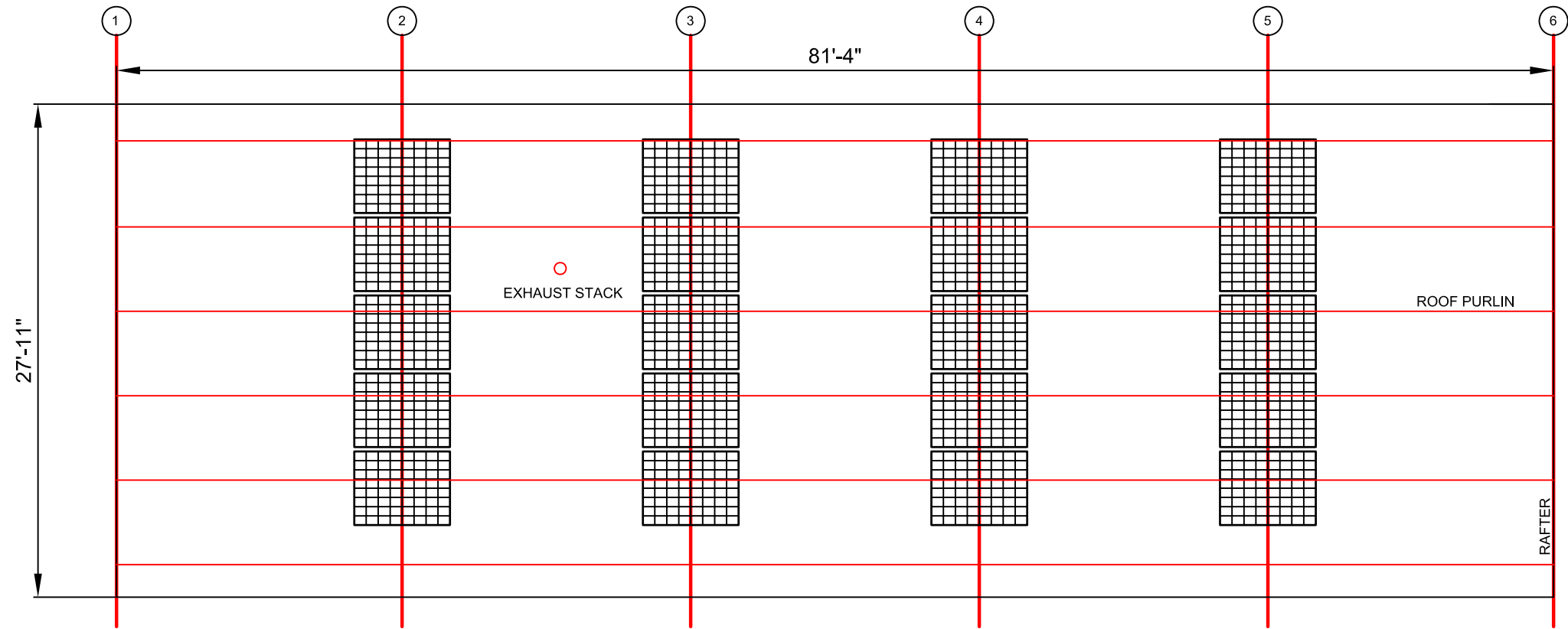
Authorized Signature: \_\_\_\_\_

Printed Name/Title/Date: \_\_\_\_\_

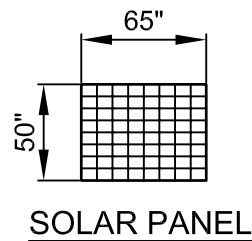
Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_ Taxpayer Identification Number: \_\_\_\_\_

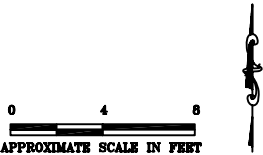


CONCEPTUAL DESIGN  
PEMACO TREATMENT COMPOUND ROOF  
SOUTH FACE




NOTES ON CONCEPTUAL DESIGN:

1. THE ESTIMATED DIMENSION OF EACH SOLAR PANEL IS 50" x 65". TOTAL AREA FROM CONFIGURATION OF 20 SOLAR PANELS, INSTALLED ON THE TREATMENT COMPOUND ROOF IS: **451.4 S.F.**
2. THE AVAILABLE LOAD FOR SOLAR PANEL IS 4.00 LB/S.F.
3. STEEL ROOF FACES SOUTH AND THE PITCH IS 4/12.
4. SOLAR POWER WILL POTENTIALLY BE USED FOR:  
1) BATTERY BACKUP SYSTEM FOR COMPUTERS, 2) BACKUP LIGHTING, AND 3) POWER BACK TO GRID.



CONCEPTUAL DESIGN  
TREATMENT COMPOUND SOLAR PANEL PLAN  
PEMACO SUPERFUND SITE  
5050 EAST SLAUSON AVENUE  
MAYWOOD, CALIFORNIA

PREPARED FOR: U.S. Environmental Protection Agency Region IX San Francisco, California		PREPARED BY:  <b>T N &amp; Associates, Inc.</b> & A Engineering and Science	
SCALE: AS SHOWN	APPROVED <b>FINAL</b>	DATE: 03/19/07	REV 2
DESIGNED: JW		DRAWING	
DRAWN: DC			
CHECKED: JW			